1 / 1 WPAT - ©Thomson Derwent

Accession Nbr :

1981-91156D [50]

Title :

Laminated identity, credit or data cards - made using polymer foils, and contg. semiconductor chip with integrated circuit for treatment of electric signals

Derwent Classes :

A84 A85 L03 P73 P76 P78 Q12 T03 T04

Patent Assignee :

(GESA) GAO GES AUTOMATION & ORG MBH

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Nbr of Patents :

14

Nbr of Countries :

9

Patent Number :

BE-889816 A 19811116 DW1981-50 22p *

GB2081644 A 19820224 DW1982-08
AP: 1981GB-0023899 19810805

FR2488427 A 19820212 DW1982-11

SE8104664 A 19820308 DW1982-12

DE3029939 A 19820325 DW1982-13
AP: 1980DE-3029939 19800807

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AP: 1981US-0288496 19810730

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CH-654127 A 19860131 DW1986-08

US4617216 A 19861014 DW1986-44

AP: 1985US-0767057 19850819

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SE-458645 B 19890417 DW1989-18

DE3029939 C 19890601 DW1989-22

NL-194104 B 20010201 DW2001-10 G06K-019/00
AP: 1981NL-0003597 19810730

Priority Details :

1980DE-3029939 19800807

IPC s :

G06K-019/00 B32B-003/10 B32B-027/30 B32B-033/00 B42D-015/02 B44F-001/12 B60J-001/00 G07C-009/00 G07C-011/00 G07F-007/10 G11B-000/00

Abstract :

BE-889816 A

The chip module and its connection wires are located inside a support, which is small w.r.t. the identity card, and which forms an insert in a laminated card made by moulding or pressing and which is bonded to the entire surface of the support. The layers forming the card pref. consist of thermoplastic at least in the region of the support contg. the chip; and the thermoplastics pref. have different softening pts. One pref. thermoplastic is polythene; but the support may be locally surrounded by an elastomer, esp. polyurethane. Many other polymers may be used, one card being made from three layers of PVC, or two PVC layers sepd. by a sheet of paper.

The chip can contain a relatively large amt. of data. The support contg. the chip is securely bonded in the card.

DE Equiv. Abstract :

DE3029939 C

A multi-layer identity card has an IC module which is embedded together with its connecting leads and contacts and the carrier element on which it is mounted, in a recess of a central layer. All three layers are joined to each other by the application of heat and pressure. The layers have different softening temps. and the layer with the lowest is directly joined to the carrier element. The result is that in the initial phase during the heat-up of the layers the pressure acting directly on the carrier element is held at a lower level than in the final phase of the assembly.

ADVANTAGE - This protects the carrier element and the IC-module on it from local pressure peaks in the initial phase. (7pp)

GB Equiv. Abstract :

GB2081644 B

A method for producing a multi-layer identification card or similar data carrier having an IC-module for processing electrical signals, the IC-module with its connection leads being arranged on a separate carrier element that is small relative to the identification card, said method avoiding localised pressures in the carrier element during production of the card and comprising the steps of: providing an identification card assembly including an internal layer having a recess for the carrier element and at least one covering layer heat sealable to the internal layer; inserting the carrier element in the recess;

before or after inserting the carrier element in the recess, establishing a buffer zone at least in the area of the carrier element for limiting the application of force to the carrier element; and applying heat and pressure to the identification card assembly to heat seal the layers together, said buffer zone limiting the application of force to the carrier element to avoid localised pressure on the carrier element.a

US Equiv. Abstract :

US4450024 A

Multilayer identification card including an I.C. module for processing electric signals is mfd. without applying localised pressures to the module.

The module is located on a carrier in a recess in an internal layer and a buffer is established near the carrier to limit the force applied to the module.

The internal layer and the assembled other layers are then heated and pressed to heat seal. (7pp)u

US4617216 A

Multilayer data card contg. accessible, electronically encoded data, comprises a card composite having an internal core layer and at least one covering layer laminated by heat and press. to one side of the core layer. Core layer has a recess. A carrier element having a data containing Ic-module member which can be accessed is received in the recess and laminated into the card composite by the covering layer. The carrier element is completely surrounded in the recess by a material having a softening point lower than that of the core layer. The material is pref. polyethylene or polyurethane and is used for protecting the carrier element against mechanical stresses.

ADVANTAGE - Improves the laminating process. (4pp)f

Manual Codes :

CPI: A12-D A12-E05 A12-E07 L03-B02

EPI: T03-A01C T04-C

Update Basic :

1981-50

Update Equivalents :

1982-08; 1982-11; 1982-12; 1982-13; 1984-23; 1984-35; 1986-08; 1986-44; 1988-23; 1989-18; 1989-22; 2001-10